

## **ABSTRACT**

### **Name of the work:**

Effects on flavonoid metabolism and transport in *in vitro* cultures II.

### **Author:**

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This diploma thesis is focused on the cultivation of *Scutellaria baicalensis* Georgii suspension cultures and on the transport of flavonoids through the tonoplast. The effect of MgATP, glutathione and bafilomycine on baicalin and baicalein transport was observed in the isolated vacuoles. Our experiments showed, that MgATP has positive effect on the transport speed and on the total amount of vacuole-stored baicalin. The transport was realized by ATP dependent tonoplast transporters, called ABC transporters.

The experiments with glutathione and bafilomycine did not show any effect on flavonoid's transport.